

Attachment 4.3 – Supporting Documents

Budget

Project C - Cottonwood Creek, Berenda Creek, and Dry Creek Arundo Eradication and Sand Removal

Madera Region – IRWM Implementation Grant Application

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Attachment 4.3 – Detailed Budget Costs

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Detailed Budget

Proposal Title: Madera Region IRWM Implementation Projects

Project Title: Madera Irrigation District Arundo Eradication and Sediment Removal Project

Budget Note #	Budget Category/Task Number	Hours	Rate	(a) Non-State Share*	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) Task/ Category Subtotals	(f) % Funding Match
	(a) Direct Project Administration Costs								
	1.1 Preparation of invoices to Applicant	240	\$76	\$18,240			\$18,240		100%
	Task 1 - Administration Subtotal			\$18,240			\$18,240		100%
	2.1 Submission of County's Labor Compliance program to DWR			\$0	\$2,000		\$2,000		0%
	Task 2 - Labor Compliance Program Subtotal			\$0	\$2,000		\$2,000		0%
	3.1 Preparation and submission of quarterly project reports to Applicant	300	\$42	\$12,600			\$12,600		100%
	3.2 Preparation and submission of annual project reports to Applicant	30	\$42	\$1,260			\$1,260		100%
	3.3 Preparation and submission of final project report to Applicant	40	\$42	\$1,680			\$1,680		100%
	3.4 Participate in Partnership Meetings	128	\$76	\$9,728			\$9,728		100%
	Task 3 - Reporting Subtotal			\$25,268			\$25,268		100%
	4 Development of Financing - Not Applicable			\$0			\$0		0%
	Task 4 - Development of Financing Subtotal			\$0			\$0		0%
	(a) Direct Project Administration Costs Total			\$43,508	\$2,000		\$45,508		96%
	(b) Land Purchase/Easement								
	5 Land Purchase/Easement - not applicable			\$0			\$0		0%
	Task 5 - Land Purchase/ Easement Subtotal			\$0			\$0		0%
	(c) Planning/Design/Engineering/ Environmental Documentation								
	6 Assessment and Evaluation – not applicable			\$0			\$0		0%
	Task 6 - Assessment and Evaluation Subtotal			\$0			\$0		0%
	7 Final Design, Deliverables: – not applicable			\$0			\$0		0%
	Task 7 - Final Design Subtotal			\$0			\$0		0%
	8.1 Preparation and filing of Notice of Exemption-County will do for MID			\$0			\$0		0%
	Task 8 Environmental Documentation Subtotal			\$0			\$0		0%
	9.1 Create application for five year renewal of 1602 Stream Bed Alteration Permit	60	\$42	\$2,520			\$2,520		100%
	9.2 Create application for 401 and 404 permits	120	\$42	\$5,040			\$5,040		100%
	9.3.1 Draft Landowner Access Agreement for sediment removal work	24	\$42	\$1,008			\$1,008		100%
	9.3.2 Legal review of Access Agreement and comment	3	\$224	\$672			\$672		0%
	9.3.3 Obtain signed Access Agreements from landowners	24	\$42	\$1,008			\$1,008		100%
	9.4 Draft Stormwater Pollution Protection Plan for SWQCB			\$0	\$9,000		\$9,000		0%
	Task 9 - Permitting Subtotal			\$10,248	\$9,000		\$19,248		0%
	(c) Planning/Design/Engineering/ Environmental Documentation Total			\$10,248	\$9,000		\$19,248		53%

Budget Note #	Budget Category/Task Number	Hours	(a) Non-State Share*	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) Task/ Category Subtotals	(f) % Funding Match
	(d) Implementation							
	10 Draft Implementation Contract-not applicable			\$0		\$0		0%
	Task 10 - Implementation Contracting Subtotal			\$0		\$0		0%
	11.1.1 First year Arundo eradication--mulch, spray, and daub			\$0	\$676,855	\$676,855		0%
	11.1.2 Second year Arundo eradication--mulch, spray, and daub			\$0	\$398,150	\$398,150		0%
	11.1.3 Third year Arundo eradication--mulch, spray, and daub			\$0	\$238,890	\$238,890		0%
	11.2 Notices sent to adjacent landowners	32	\$42	\$1,344		\$1,344		100%
	11.3 Sediment removal			\$515,326		\$515,326		100%
	Task 11 - Implementation Subtotal			\$516,670	\$1,313,895	\$1,830,565		28%
	(d) Implementation Total			\$516,670	\$1,313,895	\$1,830,565		28%
	(e) Environmental Compliance/Mitigation/Enhancement							
	Task 12 - Environmental Compliance/Mitigation Subtotal			\$0		\$0		0%
	(e) Environmental Compliance/Mitigation/Enhancement Total			\$0		\$0		0%
	(f) Project Management/Administration							
	13.1.1 Oversight of Arundo spraying and mulching activities	240	\$42	\$10,080		\$10,080		100%
	13.1.2 Oversight of Sediment removal	240	\$42	\$10,080		\$10,080		100%
	13.2 Data Collection and Monitoring Oversight	360	\$42	\$15,120		\$15,120		100%
	Task 13 - Project Management and Oversight Subtotal			\$35,280		\$35,280		100%
	(f) Project Management/Administration Total			\$35,280		\$35,280		100%
	(g) Other Costs							
	14.1.1 Raptor and Avian surveys and monitoring			\$0	\$22,800	\$22,800		0%
	14.1.2 Conduct baseline studies	340	\$76	\$0	\$25,826	\$25,826		0%
	14.2 Monitoring and inspection for SWPPP				\$2,500	\$2,500		0%
	14.3 Monitoring and inspection for ACE 401/404 permits	120	\$42	\$5,040		\$5,040		100%
	14.4.1 Monitoring and Report on the kill rate on Arundo	96	\$42	\$4,032		\$4,032		100%
	14.4.2 Report on cubic yards/tons of sediment removed	24	\$42	\$1,008		\$1,008		100%
	14.5.1 DFG Permit Renewal Fees				\$224	\$224		0%
	14.5.2 401 and 404 Permit Fees				\$120,000	\$120,000		0%
	14.6 Contingency for future surveys that may be required at permit renewal				\$30,000	\$30,000		0%
	Task 14- Other Cost Subtotal			\$10,080	\$201,350	\$211,430		5%
	(g) Other Costs			\$10,080	\$201,350	\$211,430		5%
	(h) Implementation Contingency							
	15 Implementation Contingency (20%)			\$103,334	\$262,779	\$366,113		28%
	(h) Implementation Contingency Total			\$103,334	\$262,779	\$366,113		28%
	(i) Grand Total (Sum rows (a) through (h) for each column)			\$719,120	\$1,789,024	\$2,508,144		29%

Attachment 4.3 - Total Arundo Eradication Costs

COST ESTIMATE

Total Arundo Eradication Costs (Spray, Shred, and Cut and Daub)

Madera Irrigation
District

DATE 12/10/2010
CONTRACT NO. _____
STA. NO. _____

DESCRIPTION OF WORK:

Shred, spray and cut and daub 1 mile of creek on both sides

Shred	\$ 11,113.15
Spray Total	\$ 24,320.00
Cut and Daubing Total	\$ 4,382.00

Total per mile	\$ 39,815.15
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First year Arundo infestation	17	miles
Second year Arundo infestation*	10	miles
Third year Arundo infestation*	6	miles
Total	33	miles

\$1,313,899.79

*Based on 40% success rate

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Attachment 4.3 - Total Sediment Removal Costs

COST ESTIMATE Sediment Removal

Madera Irrigation
District

DATE 12/10/2010
CONTRACT NO. _____
STA. NO. _____

DESCRIPTION OF WORK:
Sediment removal on 1 mile of creek on both sides in 20
hours

Assume 2
man crew

LABOR AND EQUIPMENT		HRS	RATE	AMOUNT
EQUIP NO.	DESCRIPTION			
	Dump truck with operator	24	\$ 90.00	\$ 2,160.00
	Dump truck with operator	24	\$ 90.00	\$ 2,160.00
	Dump truck with operator	24	\$ 90.00	\$ 2,160.00
	D6H with operator	24	\$ 125.00	\$ 3,000.00
	Gradall with operator	24	\$ 140.00	\$ 3,360.00
	Water truck with operator	24	\$ 136.00	\$ 3,264.00

TOTAL EQUIPMENT \$ 16,104.00

TOTAL EQUIPMENT \$ 16,104.00

TOTAL BILLING \$ 16,104.00

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Attachment 4.3 - Arundo Shredding Costs

COST ESTIMATE Shredding costs

Madera Irrigation District

DATE 12/10/2010
CONTRACT NO. _____
STA. _____
NO. _____

DESCRIPTION OF WORK:

Shred 1 mile of creek on both sides in 40 hours
Assume 2 man
crew

LABOR		REGULAR TIME			OVER TIME			TOTAL
		HRS	RATE	AMOUNT	HRS	RATE	AMOUNT	
Maintenance	2 Man	80	\$ 20.39	\$ 1,631.20		\$ 30.59	\$ -	\$ 1,631.20
			\$ -	\$ -		\$ -	\$ -	\$ -
			\$ -	\$ -		\$ -	\$ -	\$ -
SUBTOTAL LABOR								\$ 1,631.20
SURCHARGE 90.85%								\$ 1,481.95
TOTAL LABOR								\$ 3,113.15

EQUIPMENT		HRS	RATE	AMOUNT
EQUIP NO.	DESCRIPTION			
	Excavator with shredder head	40	\$ 200.00	\$ 8,000.00
			\$ -	\$ -
			\$ -	\$ -
TOTAL EQUIPMENT				\$ 8,000.00

MATERIAL				
DESCRIPTION	UNIT	QUANTITY	PRICE	AMOUNT
		X		
SUBTOTAL MATERIAL				\$ -
MATERIAL TAX 0.0775				\$ -
TOTAL MATERIAL				\$ -
TOTAL LABOR				\$ 3,113.15
TOTAL EQUIPMENT				\$ 8,000.00
SHIPPING				\$ -
TOTAL BILLING				\$ 11,113.15

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Attachment 4.3 – Arundo Spraying Costs

				COST ESTIMATE					
				Spraying Costs					
Madera Irrigation District							DATE	12/10/2010	
							CONTRACT NO.		
							STA. NO.		
DESCRIPTION OF WORK:									
Spray 1 mile of creek on both sides with herbicide to control Arundo Donax in 7 days									
Assume 2 man crew spraying 70 gallons of Glyphosate in 5% solution per day									
Using drift retardant, blue dye & penetrant									
LABOR		REGULAR TIME			OVER TIME			TOTAL	
		HRS	RATE	AMOUNT	HRS	RATE	AMOUNT		
Maintenance	Man	56	\$ 20.39	\$ 1,141.84		\$ 30.59	\$ -	\$ 1,141.84	
Maintenance	Man	56	\$ 20.39	\$ 1,141.84		\$ 30.59	\$ -	\$ 1,141.84	
			\$ -	\$ -		\$ -	\$ -	\$ -	
				\$ -		\$ -	\$ -	\$ -	
				SUBTOTAL LABOR				\$ 2,283.68	
				SURCHARGE			90.85%	\$ 2,074.72	
				TOTAL LABOR				\$ 4,358.40	
EQUIPMENT									
EQUIP NO.	DESCRIPTION					HRS	RATE	AMOUNT	
20	Spray Truck					56	\$ 45.00	\$ 2,520.00	
							\$ -	\$ -	
								\$ -	
								\$ -	
TOTAL EQUIPMENT								\$ 2,520.00	
MATERIAL									
DESCRIPTION				UNIT	QUANTITY		PRICE	AMOUNT	
						X			
Glyphosate 5% solution				gallon	490	X	\$ 23.00	\$ 11,270.00	
Penetrant 1.0% solution				gallon	98	X	\$ 24.00	\$ 2,352.00	
Drift Retardant 0.08% solution				ounce	700	X	\$ 0.75	\$ 525.00	
Blue Dye 0.29% solution				gallon	28.42	X	\$ 40.00	\$ 1,136.80	
Water Conditioner				gallon	43	X	\$ 21.00	\$ 903.00	
						X	\$ -	\$ -	
				SUBTOTAL MATERIAL				\$ 16,186.80	
				MATERIAL TAX			0.0775	\$ 1,254.48	
				TOTAL MATERIAL				\$ 17,441.28	
				TOTAL LABOR				\$ 4,358.40	
				TOTAL EQUIPMENT				\$ 2,520.00	
				SHIPPING				\$ -	
				TOTAL BILLING				\$ 24,319.68	

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Attachment 4.3 - Raptor Survey Cost Estimate

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9 December 2010

Dina Nolan
Madera Irrigation District (MID)
12152 Road 28 ¼
Madera, CA 93637

RE: Proposal to Conduct Nesting Bird Surveys

Dear Dina,

Based on our phone conversation, I understand that MID intends to carry out maintenance activities, including removal of sediment and giant reed (*Arundo donax*), along 32 miles of stream channel in Madera County, California. The work would occur along stretches of Cottonwood Creek, Berenda Creek, and Dry Creek in late July or early August. In compliance with the general provisions of the Streambed Alteration Agreement for this project, a pre-activity survey for active bird nests must be conducted no more than two weeks before the start of work. We propose to assist MID in satisfying this obligation as outlined below.

Task 1. Nesting Bird Surveys

A qualified biologist will perform walking transect surveys for active bird nests within 500 feet of the proposed work areas. Any active nest detected will be identified and its location will be mapped. Special attention will be given to identifying any active nest of the state-listed threatened Swainson's hawk (*Buteo swainsoni*), a species known to nest in the region and highlighted in the Streambed Alteration Agreement for this project.

Task 2. Reporting

A brief letter report summarizing the methods and results of the surveys will be prepared for MID's records or submittal to the California Department of Fish and Game if required. The report will include a figure showing the areas surveyed and the locations of any active nests. We will submit the report to MID no more than two days after the last survey.

Task 3. Coordination

I will be responsible for coordinating the surveys and ensuring the report is prepared and submitted in a timely manner.

Fee Estimate

The cost estimate for completing all tasks outlined above is **\$5700**. The table below provides a cost estimate for each task. Additional services can be completed under a separate contract or on a time-and-charges basis, if required.



Table 1. Fee Estimate

TASKS	COST
Task 1. Nesting Bird Surveys	\$ 3200
Task 2. Reporting	\$ 1336
Task 3. Coordination	\$ 947
Direct Costs (mileage, GIS/database usage, mailings and teleconferencing)	\$ 217
Total Budget	\$ 5700

Assumptions

In formulating this cost estimate, I assumed there are no obstacles to accessing the work areas, and that any necessary gate keys, lock combinations, or other arrangements with the property owners will be made. Also, I anticipate that no more than three (3) field days will be required to survey the 32 miles of stream channel. If additional days are required, modification of this scope and cost estimate may be required.

Should you have any questions, feel free to contact me at any time.

Best regards,

Jeff N. Davis
Project Manager and Senior Wildlife Ecologist
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Cell: (559) 246-3272
Email: jdavis@harveyecology.com